

A rare presentation of vena cava superior syndrome: ascending aorta dilatation

Vena cava superior syndrome and ascending aorta dilatation

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A 72-year-old male patient with past medical history of hypertension and coronary artery disease was admitted to the emergency clinic after two hours of acute-onset edema of the lower part of the head and neck. The patient was using acetylsalicylic acid, angiotensin converting inhibitor and beta blocker agents. On his physical examination, blood pressure and heart rates were 125/70 mmHg and 95 bpm, respectively. Heart and respiratory auscultation findings were normal. Electrocardiogram showed sinus rhythm. The initial evaluation of the emergency physician was angioedema and patient was consulted to the dermatology. However, there was an increase in clinical progression, head, and neck swelling in the patient. The patient was quickly drawn to computer tomography. Computed tomography showed that the ascending aorta was highly dilated (Figure-1). The dilated ascending aorta was obstructed by the vena cava superior (Figure-2 and Figure-3). It was also showed that the right atrium was pressed by the dilated ascending aorta (Figure-4). Left ventricular systolic functions were normal in the echocardiography of the patient, and ascending aortic diameter of 9.8 cm was measured in parasternal long axis images. The patient was immediately transferred to cardiovascular surgery for surgical treatment purposes.

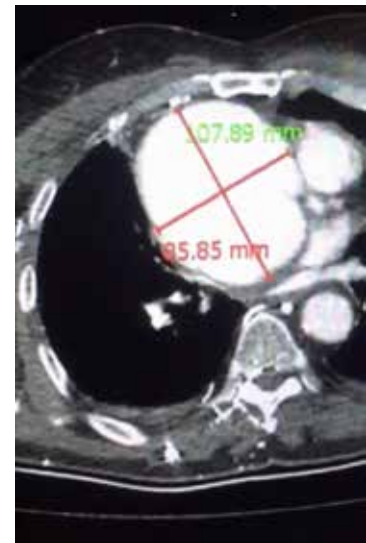


Figure 1. Axial C+ CT Angiography Arterial Phase: The aneurysmal dilatation of the ascending aorta with no intimal calcification or perianeurysmal leakage, approximately 11x8.5cm in diameter at the upper mediastinal level.

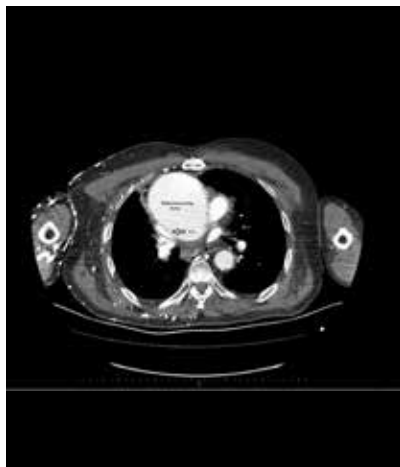


Figure 2. Axial C+ CT Angiography Arterial Phase: The exceptionally dilated ascending aorta that is compressing superior vena cava which leads to superior vena cava syndrome.



Figure 3. Sagittal C+ CT Angiography Arterial Phase: The exceptionally dilated ascending aorta that is compressing superior vena cava from posterior aspect. Superior vena cava getting thinner by its course.

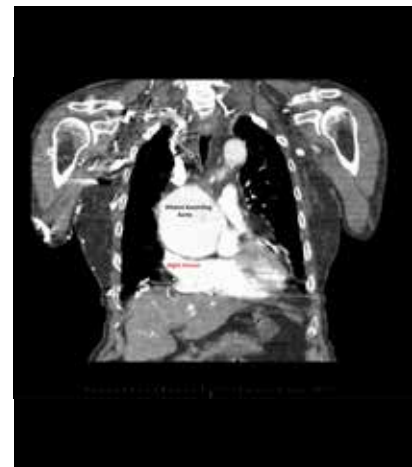


Figure 4. Coronal C+ CT Angiography Arterial Phase: The aneurysmal dilatation of the ascending aorta above right atrium from coronal view.